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Alexey S. Kabalnov

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07/26/2005

HEWLETT-PACKARD COMPANY

Intellectual Property Administration

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EXAMINER

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ART UNIT

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Please find below and/or attached an Office communication concerning this application or proceeding.



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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/895,468  
Filing Date: June 29, 2001  
Appellant(s): KABALNOV ET AL.

**MAILED**  
**JUL 26 2005**  
**GROUP 2800**

\_\_\_\_\_  
Gary P. Oakeson  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed June 13, 2005 appealing from the Office  
action mailed 1/13/05.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

This appeal involves claims 1-7.

Claim 8 is objected.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

The following is a listing of the evidence (e.g., patents, publications, Official Notice, and admitted prior art) relied upon in the rejection of claims under appeal.

EP 960,873	Tognetti	12-1999
6,357,868	Pfaff et al	3-2003
5,891,232	Moffatt et al	4-1999
4,136,076	Daniels	1-1979

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-4 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Tognetti et al. (EP 960 873) in view of Pfaff et al (USPN 6,357,868).

Tognetti et al. discloses a method for printing on an article using any types of printing process (Page 2: line 3-15) comprising:

- Applying a fluid glazing material to an article creating a coating surface on the article, the fluid glazing material contains an under-printing agent (Page 2: line 33-35);
- Applying an aqueous chromophore-containing fluid onto the coated surface, the fluid primer contacts the chromophore-containing fluid (Page 2: line 36-40, 52-53, page4: line 13-15);
- Firing the article (Page 2: line 41);
- Transfer medium (Page 2: line 13);
- The article is a ceramic (Page 2: line 19-21).

Tognetti et al. discloses the claimed invention except that using direct printing to the material instead of ink jet printing.

Pfaff teaches that ink jet printing is direct or indirect printing (column 2: line 35-42). Therefore, because direct printing is one type of inkjet printing, one of ordinary skill in the art would have found it obvious to have provided Tognette with ink jet print head for the purpose of achieved good printing result (Column 5: line 43-46).

2. Claims 5 and 6 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Tognetti et al. (EP 960 873) in view of Pfaff et al (USPN 6,357,868) as applied to claims 1-4 above, and further in view of Moffatt et al. (USPN 5,891,232).

The combination of Tognetti et al and Pfaff et al. fails to teach the chromophore containing fluid comprise a transition metal salt and the transition metal salt is selected from the group consisting of nitrates and sulfates.

Moffatt et al. teaches the transition metal salt is selected from the group consisting of nitrates and sulfates (Column 5: line 30-35).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Tognette and Pfaff with the teaching of Moffatt using the chromophore comprise a transition metal salt and the transition metal salt is selected from the group consisting of nitrates and sulfates. The motivation of doing so is to obtaining a smearfast and fast drying ink.

3. Claim 7 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Tognetti et al. (EP 960 873) and Pfaff et al. (USPN 6,357,868) in view of Moffatt et al. (USPN 5,891,232) as applied to claims 1 and 5 above, and further in view of Daniels (USPN 4,136,076).

The combination of Tognetti et al, Pfaff et al and Moffatt fails to teach the metal ion provided by the transition metal salt selected from the group consisting of cobalt, copper, nickel and tin.

Daniels teaches the metal ion provided by the transition metal sulfate salt is selected from the group consisting of cobalt, copper, nickel and tin (Column 3: line 6-14)

It would have been obvious to one having ordinary skill in the art at the time the invention was made as modify Tognette, Moffatt and Pfaff with the teaching of Daniels to have the metal salt selected from the group consisting of cobalt, copper, nickel and tin. The motivation of doing so is to obtain fast drying with good extended print quality (Daniels USPN 4,136,076, Column 3: line 59-60).

**(10) Response to Argument**

For the benefit of the Board, it is useful to define that direct printing as understood by skilled artisans involves any printing process that has direct or uninterrupted transfer of the ink to the medium. On the contrary indirect printing is any printing process that involves an indirect or interrupted transfer of ink to the medium. This usually involves ink being ejected onto a drum, platen or some other transfer member and then subsequently transferring from the transfer member to the medium.

Ink jet technology can be used for both direct or indirect printing, and Pfaff explicitly teaches this.

Therefore, Applicant's argument that there is no motivation to combine Tognetti and Pfaff is not persuasive. Pfaff teaches direct printing is one type of ink jet printing. That means ink jet printing can print both directly on the material or indirectly on the material. Therefore, it would have been obvious to one having ordinary skill in the art to use the ink jet to print on the ceramic for the purpose of achieving a good result such as obtaining high resolution, high-quality color image at a high printing speed or less noise generation because the ink jet recording apparatus records using non-impact system as taught in Pfaff (Column 5: line 43-46).

Second, Applicant argues that Pfaff does not teach direct printing of aqueous ink onto the ceramic article. The argument is not deemed to be persuasive because in the "Final Office Action" the Examiner stated that the primary reference of Tognetti discloses applying an aqueous chromophore-containing fluid onto the coated surface, the fluid primer contacts the chromophore-containing fluid (Page 2: line 36-40, 52-53,

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page4: line 13-15). The Examiner is only relying on the secondary reference of Pfaff to shows that it is obvious to use ink jet printer to print on the ceramic for the purpose of achieving a good result as obtaining high resolution, high-quality color image at a high printing speed and the noise generated is less because the ink jet recording apparatus record using non-impact system.

Third, Applicant's argument that Pfaff teaches away from the present invention. The argument is not deemed to be persuasive because the failure problem in the ink jet printer as Applicant pointed out the column 2; line 3-8 is only a prior art problem. Pfaff's invention is to overcome this problem by still using inkjet printer technology to print on the ceramic.


Fourth, Applicant's argument that even if Tognetti and Pfaff are combinable, neither reference, alone or in combination, teaches the jetting of aqueous chromophore containing fluid. The argument is not deemed to be persuasive because Tognetti teaches applying an aqueous chromophore-containing fluid onto the coated surface, the fluid primer contacts the chromophore-containing fluid by direct printing (Page 2: line 36-40, 52-53, page4: line 13-15). Tognetti only lacks using ink jet printer. Pfaff shows that direct printing is one of the type of ink jet printing, meaning ink jet printer prints directly on the ceramic or indirectly on the ceramic. It is obvious to one having skill in the art to use the ink jet to print on the ceramic for the purpose of achieving a good result as taught in Pfaff (Column 5: line 43-46). Therefore, the combination of Tognetti and Pfaff teaches the jetting of aqueous chromophore containing fluid.



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For the above reasons, it is believed that the rejections should be sustained.

An appeal conference was held on July 20, 2005 with the following conferees:

Mr. Drew Dunn, SPE 

Mr. Stephen Meier, SPE 

Ly Tran, Examiner



LT

July 20, 2005

Conferees

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Respectfully submitted,



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